



Chupadera Mesa, New Mexico, Site

FACT SHEET

*This fact sheet provides information about the Chupadera Mesa, New Mexico, Site.
This site is managed by the U.S. Department of Energy Office of Legacy Management.*

Site Description and History

The Chupadera Mesa, New Mexico, Site is located approximately 28 miles northeast of the Trinity atomic bomb test site at White Sands Missile Range, New Mexico (also referred to as Area 21). The area consists of open range and is used primarily for cattle grazing. The Trinity test took place approximately 60 miles north of Alamogordo, New Mexico.

The nation's first atomic bomb test was conducted at the Trinity test site on July 16, 1945, as part of the Manhattan Project, which was established to conduct research for the development and production of nuclear weapons during World War II. Windblown fallout from the Trinity test drifted northeast over the White Sands Missile Range, Chupadera Mesa, and other ranching areas. Radiation measurements began the same day as the test and, since then, surveys and studies have been performed in the area by the University of California (in 1948, 1950, and 1951), the U.S. Environmental Protection Agency (in 1973 and 1974), and the Los Alamos Scientific Laboratory (from 1972 to 1979).

The Chupadera Mesa Site was one of six regions of study and sampling (along with the Trinity area, White Sands Missile Range, Bingham area, Far Fallout area, and San Antonio area) to evaluate the presence of residual radioactive contamination. Radioactive decay since the Trinity test has resulted in substantial reductions of fallout levels at the Chupadera Mesa Site and has left only longer-lived radioactive materials, including cesium-137, strontium-90, and plutonium-239 (with traces of europium-155). However, based on these extensive studies and sampling data, the U.S. Department of Energy (DOE) determined that the dose from the residual radioactive contamination for an individual living in the fallout area and consuming food produced there was less than the U.S. Nuclear Regulatory Commission criteria of 25 millirem per year for unrestricted use. Therefore, DOE concluded that no remedial action was needed at the site.

Regulatory Setting

The U.S. Atomic Energy Commission, a predecessor agency to the DOE, established the Formerly Utilized



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Location of the Chupadera Mesa, New Mexico, Site

Sites Remedial Action Program (FUSRAP) in March 1974 to evaluate radioactive contamination at sites where work was performed to develop the nation's nuclear weapons and early atomic energy program. After reviewing records and radiometric surveys for more than 600 sites connected with the nuclear weapons program, DOE identified 46 sites that potentially required cleanup, including the Chupadera Mesa Site. Congress transferred responsibility for FUSRAP site characterization and remediation to the U.S. Army Corps of Engineers in 1997. DOE retains responsibility for long-term surveillance and maintenance of remediated FUSRAP sites.

The Chupadera Mesa Site was evaluated to criteria in *Guidelines for Residual Radioactive Material at Formerly Utilized Sites Remedial Action Program and Remote Surplus Facilities Management Program Sites*, and no remedial action was deemed necessary. A notice of cleanup certification for the site was documented via an April 22, 1986, letter from the DOE Division of Facility

and Site Decommissioning Projects Office of Nuclear Energy to the Environmental Safety and Health Division of the DOE Albuquerque Operations Office.

In fiscal year 2004, DOE transferred responsibility for the Chupadera Mesa Site from the DOE Office of Environmental Management to the DOE Office of Legacy Management.

Current Site Conditions

Radiological survey data indicate that the radiological condition of the Chupadera Mesa Site is in compliance with applicable DOE standards and guidelines for cleanup of residual radioactive contamination. A release survey and evaluation was conducted by the Los Alamos National Laboratory. The evaluation indicated that the incremental dose of 13 millirems per year for a hypothetical individual using the area as a residence is below the 25 millirems per year criteria for unrestricted use and well below the 150 millirems per year estimate for background in the area. Therefore, DOE released the site for unrestricted use.

Legacy Management Activities

No monitoring, maintenance, or site inspections are required for the Chupadera Mesa Site. DOE Legacy Management responsibilities consist of managing site records and responding to stakeholder inquiries.

Contacts

Documents related to the Chupadera Mesa Site are available on the DOE Legacy Management website at <http://www.LM.doe.gov/land/sites/nm/chupadera/chupadera.htm>.

For more information about DOE Legacy Management activities at the Chupadera Mesa Site, contact

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